

WHAT IS CLAIMED
PATENT CLAIMS

A

Sub
A5

1. Method for controlling switching-oriented actions (ACT1...ACT5) such as, for example, the routing of call connections or the acquisition of call charges, etc., in a mobile radio telephone system (PLMN) that comprises at least one radio-oriented sub-system (BSS) with base station controllers (BSC) and base stations (BTS) for radio connections from and to mobile stations (MS) of mobile subscribers, a switching-oriented sub-system (SSS) with subscriber data bases (VLR, HLR) and mobile switching centers (MSC) for line-switched connections and an operation and maintenance sub-system (OMS) having at least one operation and maintenance center (OMC) for the administration and control of the devices provided in the radio-oriented sub-system (BSS) and in the switching-oriented sub-system (SSS), characterized in that respective mobile radio telephone-specific data (MD) for defining conditions (CD1...CD2) for a subscriber-contended control of the actions (ACT1...ACT5) in the mobile switching center (MSC) are established subscriber-individually for one or more mobile subscribers via the operation and maintenance sub-system (OMS); and in that, given an incoming call (MTC) or an outgoing call (MOC) or given a message transmission (USSD), the mobile switching center (MSC) respectively evaluates call-related data and/or subscriber specific data with respect to the conditions (CD1...CD6) and, given a satisfied condition (CD2, CD3, CD4), at least one action (ACT2, ACT3, ACT4) is controlled subscriber-dependent.

2. Method according to claim 1, characterized in that the conditions (CD1...CD6) for the subscriber-dependent control of the actions (ACT1...ACT5) are respectively defined by a single, call-related/subscriber-specific datum or by operation of a plurality of call-related/subscriber-specific data.

3. Method according to claim 2, characterized in that the operation of the call-related/subscriber-specific data ensues via a logical AND operation and/or via a logical OR operation.

5 4. Method according to one of the preceding claims, characterized in that, given a plurality of satisfied conditions (CD2, CD3, CD4), different actions (ACT2, ACT3, ACT4) are controlled subscriber-dependent.

10 5. Method according to one of the preceding claims, characterized in that, given the parallel existence of a plurality of satisfied conditions (CD1, CD4), the actions (ACT1, ACT4) are provided with priority numbers (PR3, PR2) with which a sequence of the actions to be controlled is defined.

15 6. Method according to claim 4 or 5, characterized in that, given the parallel existence of a plurality of satisfied conditions (CD2, CD3, CD4), blocking information (EXC3, EXC4) are employed with which a respective action (ACT3, ACT4) is excluded from the control by another action (ACT2, ACT3).

7. Method according to claim 6, characterized in that the blocking information (EXC3, EXC4) are entered into a table (TEX) that is located in the mobile switching center (MSC) or in a subscriber data base of the mobile switching center.

20 8. Method according to one of the preceding claims, characterized in that the type (CTY) of call (CA) or the type of message transmission (USSD) is evaluated as call-related data.

9. Method according to one of the preceding claims, characterized in that the international mobile subscriber identifier (ISMI), the service class mark (SCM) for triggering services of an intelligent network, the mobile subscriber category (CAT) or the supplementary services usable by the mobile subscriber are evaluated as subscriber-specific data.

10. Method according to one of the preceding claims, characterized in that given an outgoing call (MOC), the subscriber telephone number selected by the mobile subscriber or a numerical range (COD) of the selected subscriber telephone number is evaluated and the location telephone number or a numerical range of the location telephone number assigned in the mobile radio telephone system is evaluated given the incoming call (MTC).

11. Method according to one of the preceding claims, characterized in that, given an incoming call with call forwarding (CF) to a destination telephone number, the destination telephone number or a numerical range (COD) of the destination telephone number is evaluated.

12. Method according to one of the preceding claims, characterized in that the blocking of the call or the suppression of a call forwarding or the blocking of the message transmission is controlled subscriber-dependent as action.

13. Method according to one of the preceding claims, characterized in that the cleardown of the call or the routing of the call to an announcement means are controlled subscriber-dependent as actions (ACT4, ACT3).

14. Method according to one of the preceding claims, characterized in that the routing of the call connection to a specific destination or the acquisition of the call charges in a specific charge zone are controlled subscriber-dependent as actions (ACT1, ACT2).

5 15. Method according to one of the preceding claims, characterized in that the routing of the call connection to a service control point of an intelligent network (IN) is controlled subscriber-dependent as action (ACT5), and the service class mark (SCM) is thereby set preceding the destination telephone number.

10 16. Method according to one of the preceding claims, characterized in that a telephone number modification by insertion of subscriber-individual information into the selected telephone number given an outgoing call (MOC), into the location telephone number given an incoming call (MTC) or into the destination telephone number given an incoming call with call forwarding (CF) is controlled subscriber-dependent as action.

15

17. Method according to one of the preceding claims, characterized in that an eavesdropping of the call connection or an authorization or, respectively, suppression of services/performance features are controlled subscriber-dependent as actions.

20 18. Method according to one of the preceding claims, characterized in that a conversion of an abbreviated code selected by the subscriber into a telephone number is controlled subscriber-dependent as action.

19. Mobile radio telephone system for the control of switching-oriented actions (ACT1...ACT5) such as, for example, the routing of call connections or the acquisition of call charges, etc., comprising at least one radio-oriented sub-system (BSS) that comprises base station controllers (BSC) and base stations (BTS) for radio connections from and to mobile stations (MS) of mobile subscribers, a switching-oriented sub-system (SSS) that comprises subscriber data bases (VLR, HLR) and mobile switching centers (MSC) for line-switched connections, and an operation and maintenance sub-system (OMC) having at least one operation and maintenance center (OMC) for the administration and control of the devices provided in the radio-oriented sub-system (BSS) and in the switching-oriented sub-system (SSS), characterized in that mobile radio telephone-specific data respectively offered for defining conditions (CD1...CD6) for a subscriber-dependent control of the actions (ACT1....ACT5) are subscriber-individually established for one or more mobile subscribers in the mobile switching center (MSC) via the operation and maintenance sub-system (OMS); and in that the mobile switching center (MSC) has means (SDFC) that, given an incoming call (MTC) or an outgoing call (MOC) or given a message transmission (USSD), respectively evaluates call-related data and/or subscriber-specific data with reference to the conditions and, given a satisfied condition, controls at least one action (ACT1...ACT5) subscriber-dependent.